SEQUENCE LISTING

<110> Hariharan, Kandasamy
Daniels, Mark
McLachlan, Karen

<120> GENES OVEREXPRESSED BY OVARIAN CANCER AND THEIR USE IN DEVELOPING NOVEL THERAPEUTICS

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tggccacgcc ggctgccagc aatgccggcc ggcccccgcc atgcagcagg gagctggctg 420

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<212> DNA
<213> Homo sapiens

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<223> n is a, c, g, or t

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cgtgatagat gctggtcggg gggaacatag caacagcgcc gagcagagag cccacctgga 360

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<212> DNA
<213> Homo sapiens

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<211> 490
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 19
<211> 1829
<212> DNA
<213> Homo sapiens

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<211> 584
<212> DNA
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gatttcccta attactgttt tgaatgacac atttgttgaa ggattcaaca ccatctctgg 480

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<211> 328
<212> DNA
<213> Homo sapiens

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<210> 22
<211> 628
<212> PRT
<213> Homo sapiens

<400> 22

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            20                  25                  30

Cys Asp Val Thr Leu Thr Ala Gln Gly Gln Gln Phe His Cys His Lys
        35                  40                  45

Ala Val Leu Ala Ser Cys Ser Gln Tyr Phe Arg Ser Leu Phe Ser Ser
    50                  55                  60

His Pro Pro Leu Gly Gly Gly Val Gly Gly Gln Asp Gly Leu Gly Ala
65                  70                  75                  80

Pro Lys Asp Gln Gln Gln Pro Pro Gln Gln Gln Pro Ser Gln Gln Gln
                85                  90                  95

Gln Pro Pro Pro Gln Glu Glu Pro Gly Thr Pro Ser Ser Ser Pro Asp
            100                 105                 110

Asp Lys Leu Leu Thr Ser Pro Arg Ala Ile Asn Asn Leu Val Leu Gln
        115                 120                 125

Gly Cys Ser Ser Ile Gly Leu Arg Leu Val Leu Glu Tyr Leu Tyr Thr
    130                 135                 140

Ala Asn Val Thr Leu Ser Leu Asp Thr Val Glu Glu Val Leu Ser Val
145                 150                 155                 160

Ser Lys Ile Leu His Ile Pro Gln Val Thr Lys Leu Cys Val Gln Phe
                165                 170                 175

Leu Asn Asp Gln Ile Ser Val Gln Asn Tyr Lys Gln Val Cys Lys Ile
            180                 185                 190

Ala Ala Leu His Gly Leu Glu Glu Thr Lys Lys Leu Ala Asn Lys Tyr
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225                 230                 235                 240

Met Ser Val Leu Trp Leu Glu His Asp Arg Glu Thr Arg Met Gln Tyr
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Ala Pro Asp Leu Met Lys Arg Leu Arg Phe Ala Leu Ile Pro Ala Pro
            260                 265                 270

Glu Leu Val Glu Arg Val Gln Ser Val Asp Phe Met Arg Thr Asp Pro
        275                 280                 285

Val Cys Gln Lys Leu Leu Leu Asp Ala Met Asn Tyr His Leu Met Pro
    290                 295                 300

Phe Arg Gln His Cys Arg Gln Ser Leu Ala Ser Arg Ile Arg Ser Asn
305                 310                 315                 320

Lys Lys Met Leu Leu Leu Val Gly Gly Leu Pro Pro Gly Pro Asp Arg
                325                 330                 335

Leu Pro Ser Asn Leu Val Gln Tyr Tyr Asp Asp Glu Lys Lys Thr Trp
            340                 345                 350

Lys Ile Leu Thr Ile Met Pro Tyr Asn Ser Ala His His Cys Val Val
        355                 360                 365

Glu Val Glu Asn Phe Leu Phe Val Leu Gly Gly Glu Asp Gln Trp Asn
    370                 375                 380

Pro Asn Gly Lys His Ser Thr Asn Phe Val Ser Arg Tyr Asp Pro Arg
385                 390                 395                 400

Phe Asn Ser Trp Ile Gln Leu Pro Pro Met Gln Glu Arg Arg Ala Ser
                405                 410                 415

Phe Tyr Ala Cys Arg Leu Asp Lys His Leu Tyr Val Ile Gly Gly Arg
            420                 425                 430

Asn Glu Thr Gly Tyr Leu Ser Ser Val Glu Cys Tyr Asn Leu Glu Thr
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Asn Glu Trp Arg Tyr Val Ser Ser Leu Pro Gln Pro Leu Ala Ala His
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Asn Gly Glu Tyr Val Pro Trp Leu Tyr Cys Tyr Asp Pro Val Met Asp
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Val Trp Ala Arg Lys Gln Asp Met Asn Thr Lys Arg Ala Ile His Thr
            500                 505                 510

Leu Ala Val Met Asn Asp Arg Leu Tyr Ala Ile Gly Gly Asn His Leu
        515                 520                 525

Lys Gly Phe Ser His Leu Asp Val Met Leu Val Glu Cys Tyr Asp Pro
    530                 535                 540

Lys Gly Asp Gln Trp Asn Ile Leu Gln Thr Pro Ile Leu Glu Gly Arg
545                 550                 555                 560

Ser Gly Pro Gly Cys Ala Val Leu Asp Asp Ser Ile Tyr Leu Val Gly
                565                 570                 575

Gly Tyr Ser Trp Ser Met Gly Ala Tyr Lys Ser Ser Thr Ile Cys Tyr
            580                 585                 590

Cys Pro Glu Lys Gly Thr Trp Thr Glu Leu Glu Gly Asp Val Ala Glu
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Pro Leu Ala Gly Pro Ala Cys Val Thr Val Ile Leu Pro Ser Cys Val
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Pro Tyr Asn Lys
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<211> 4261
<212> DNA
<213> Homo sapiens

<400> 23

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gacttaaaaa cacacataca aacaaaactc ttttcattct gaaatttctg tctggttctt 2160

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acgggaactg ctggggtatg gaatacagat gtggcagctc aggtagcccc aaattgcctg 180

gaagaataca tcatgttttt cgataagaag aaattgtagg atccagtttt ttttttaccg 240

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<210> 31
<211> 516
<212> PRT
<213> Homo sapiens

<400> 31

Met Gly Leu His Phe Lys Trp Pro Leu Gly Ala Pro Met Leu Ala Ala
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Ile Tyr Ala Met Ser Met Val Leu Lys Met Leu Pro Ala Leu Gly Met
20 25 30

Ala Cys Pro Pro Lys Cys Arg Cys Glu Lys Leu Leu Phe Tyr Cys Asp
35 40 45

```
Ser Gln Gly Phe His Ser Val Pro Asn Ala Thr Asp Lys Gly Ser Leu
    50                  55                  60

Gly Leu Ser Leu Arg His Asn His Ile Thr Glu Leu Glu Arg Asp Gln
65                  70                  75                  80

Phe Ala Ser Phe Ser Gln Leu Thr Trp Leu His Leu Asp His Asn Gln
                85                  90                  95

Ile Ser Thr Val Lys Glu Asp Ala Phe Gln Gly Leu Tyr Lys Leu Lys
            100                 105                 110

Glu Leu Ile Leu Ser Ser Asn Lys Ile Phe Tyr Leu Pro Asn Thr Thr
        115                 120                 125

Phe Thr Gln Leu Ile Asn Leu Gln Asn Leu Asp Leu Ser Phe Asn Gln
    130                 135                 140

Leu Ser Ser Leu His Pro Glu Leu Phe Tyr Gly Leu Arg Lys Leu Gln
145                 150                 155                 160

Thr Leu His Leu Arg Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Leu
                165                 170                 175

Phe Trp Asp Cys Arg Ser Leu Glu Phe Leu Asp Leu Ser Thr Asn Arg
            180                 185                 190

Leu Arg Ser Leu Ala Arg Asn Gly Phe Ala Gly Leu Ile Lys Leu Arg
        195                 200                 205

Glu Leu His Leu Glu His Asn Gln Leu Thr Lys Ile Asn Phe Ala His
    210                 215                 220

Phe Leu Arg Leu Ser Ser Leu His Thr Leu Phe Leu Gln Trp Asn Lys
225                 230                 235                 240

Ile Ser Asn Leu Thr Cys Gly Met Glu Trp Thr Trp Gly Thr Leu Glu
                245                 250                 255

Lys Leu Asp Leu Thr Gly Asn Glu Ile Lys Ala Ile Asp Leu Thr Val
            260                 265                 270

Phe Glu Thr Met Pro Asn Leu Lys Ile Leu Leu Met Asp Asn Asn Lys
        275                 280                 285
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Leu Asn Ser Leu Asp Ser Lys Ile Leu Asn Ser Leu Arg Ser Leu Thr
290 295 300

Thr Val Gly Leu Ser Gly Asn Leu Trp Glu Cys Ser Ala Arg Ile Cys
305 310 315 320

Ala Leu Ala Ser Trp Leu Gly Ser Phe Gln Gly Arg Trp Glu His Ser
325 330 335

Ile Leu Cys His Ser Pro Asp His Thr Gln Gly Glu Asp Ile Leu Asp
340 345 350

Ala Val His Gly Phe Gln Leu Cys Trp Asn Leu Ser Thr Thr Val Thr
355 360 365

Val Met Ala Thr Thr Tyr Arg Asp Pro Thr Thr Glu Tyr Thr Lys Arg
370 375 380

Ile Ser Ser Ser Ser Tyr His Val Gly Asp Lys Glu Ile Pro Thr Thr
385 390 395 400

Ala Gly Ile Ala Val Thr Thr Glu Glu His Phe Pro Glu Pro Asp Asn
405 410 415

Ala Ile Phe Thr Gln Arg Val Ile Thr Gly Thr Met Ala Leu Leu Phe
420 425 430

Ser Phe Phe Phe Ile Ile Phe Ile Val Phe Ile Ser Arg Lys Cys Cys
435 440 445

Pro Pro Thr Leu Arg Arg Ile Arg Gln Cys Ser Met Val Gln Asn His
450 455 460

Arg Gln Leu Arg Ser Gln Thr Arg Leu His Met Ser Asn Met Ser Asp
465 470 475 480

Gln Gly Pro Tyr Asn Glu Tyr Glu Pro Thr His Glu Gly Pro Phe Ile
485 490 495

Ile Ile Asn Gly Tyr Gly Gln Cys Lys Cys Gln Gln Leu Pro Tyr Lys
500 505 510

Glu Cys Glu Val
515

<210> 32
<211> 522
<212> PRT
<213> Homo sapiens

<400> 32

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Met Asp Phe Leu Leu Leu Gly Leu Cys Leu Tyr Trp Leu Leu Arg Arg
1               5                  10                  15

Pro Ser Gly Val Val Leu Cys Leu Leu Gly Ala Cys Phe Gln Met Leu
            20                  25                  30

Pro Ala Ala Pro Ser Gly Cys Pro Gln Leu Cys Arg Cys Glu Gly Arg
        35                  40                  45

Leu Leu Tyr Cys Glu Ala Leu Asn Leu Thr Glu Ala Pro His Asn Leu
    50                  55                  60

Ser Gly Leu Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Ser Glu Leu
65                  70                  75                  80

Arg Ala Gly Gln Phe Thr Gly Leu Met Gln Leu Thr Trp Leu Tyr Leu
                85                  90                  95

Asp His Asn His Ile Cys Ser Val Gln Gly Asp Ala Phe Gln Lys Leu
            100                 105                 110

Arg Arg Val Lys Glu Leu Thr Leu Ser Ser Asn Gln Ile Thr Gln Leu
        115                 120                 125

Pro Asn Thr Thr Phe Arg Pro Met Pro Asn Leu Arg Ser Val Asp Leu
    130                 135                 140

Ser Tyr Asn Lys Leu Gln Ala Leu Ala Pro Asp Leu Phe His Gly Leu
145                 150                 155                 160

Arg Lys Leu Thr Thr Leu His Met Arg Ala Asn Ala Ile Gln Phe Val
                165                 170                 175

Pro Val Arg Ile Phe Gln Asp Cys Arg Ser Leu Lys Phe Leu Asp Ile
            180                 185                 190

Gly Tyr Asn Gln Leu Lys Ser Leu Ala Arg Asn Ser Phe Ala Gly Leu
        195                 200                 205

Phe Lys Leu Thr Glu Leu His Leu Glu His Asn Asp Leu Val Lys Val
    210                 215                 220
```

```
Asn Phe Ala His Phe Pro Arg Leu Ile Ser Leu His Ser Leu Cys Leu
225                 230                 235                 240

Arg Arg Asn Lys Val Ala Ile Val Val Ser Ser Leu Asp Trp Val Trp
                245                 250                 255

Asn Leu Glu Lys Met Asp Leu Ser Gly Asn Glu Ile Glu Tyr Met Glu
            260                 265                 270

Pro His Val Phe Glu Thr Val Pro His Leu Gln Ser Leu Gln Leu Asp
        275                 280                 285

Ser Asn Arg Leu Thr Tyr Ile Glu Pro Arg Ile Leu Asn Ser Trp Lys
    290                 295                 300

Ser Leu Thr Ser Ile Thr Leu Ala Gly Asn Leu Trp Asp Cys Gly Arg
305                 310                 315                 320

Asn Val Cys Ala Leu Ala Ser Trp Leu Asn Asn Phe Gln Gly Arg Tyr
                325                 330                 335

Asp Gly Asn Leu Gln Cys Ala Ser Pro Glu Tyr Ala Gln Gly Glu Asp
            340                 345                 350

Val Leu Asp Ala Val Tyr Ala Phe His Leu Cys Glu Asp Gly Ala Glu
        355                 360                 365

Pro Thr Ser Gly His Leu Leu Ser Ala Val Thr Asn Arg Ser Asp Leu
    370                 375                 380

Gly Pro Pro Ala Ser Ser Ala Thr Thr Leu Ala Asp Gly Gly Glu Gly
385                 390                 395                 400

Gln His Asp Gly Thr Phe Glu Pro Ala Thr Val Ala Leu Pro Gly Gly
                405                 410                 415

Glu His Ala Glu Asn Ala Val Gln Ile His Lys Val Val Thr Gly Thr
            420                 425                 430

Met Ala Leu Ile Phe Ser Phe Leu Ile Val Val Leu Val Leu Tyr Val
        435                 440                 445

Ser Trp Lys Cys Phe Pro Ala Ser Leu Arg Gln Leu Arg Gln Cys Phe
    450                 455                 460
```

```
Val Thr Gln Arg Arg Lys Gln Lys Gln Lys Gln Thr Met His Gln Met
465                 470                 475                 480

Ala Ala Met Ser Ala Gln Glu Tyr Tyr Val Asp Tyr Lys Pro Asn His
                485                 490                 495

Ile Glu Gly Ala Leu Val Ile Ile Asn Glu Tyr Gly Ser Cys Thr Cys
            500                 505                 510

His Gln Gln Pro Ala Arg Glu Cys Glu Val
        515                 520
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<210> 33
<211> 507
<212> PRT
<213> Homo sapiens

<400> 33

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Met Ser Val Val Leu Val Leu Leu Pro Thr Leu Leu Leu Val Met Leu
1               5                   10                  15

Thr Gly Ala Gln Arg Ala Cys Pro Lys Asn Cys Arg Cys Asp Gly Lys
            20                  25                  30

Ile Val Tyr Cys Glu Ser His Ala Phe Ala Asp Ile Pro Glu Asn Ile
        35                  40                  45

Ser Gly Gly Ser Gln Gly Leu Ser Leu Arg Phe Asn Ser Ile Gln Lys
    50                  55                  60

Leu Lys Ser Asn Gln Phe Ala Gly Leu Asn Gln Leu Ile Trp Leu Tyr
65                  70                  75                  80

Leu Asp His Asn Tyr Ile Ser Ser Val Asp Glu Asp Ala Phe Gln Gly
                85                  90                  95

Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Lys Ile Thr Tyr
            100                 105                 110

Leu His Asn Lys Thr Phe His Pro Val Pro Asn Leu Arg Asn Leu Asp
        115                 120                 125

Leu Ser Tyr Asn Lys Leu Gln Thr Leu Gln Ser Glu Gln Phe Lys Gly
    130                 135                 140

Leu Arg Lys Leu Ile Ile Leu His Leu Arg Ser Asn Ser Leu Lys Thr
```

145 150 155 160

Val Pro Ile Arg Val Phe Gln Asp Cys Arg Asn Leu Asp Phe Leu Asp
165 170 175

Leu Gly Tyr Asn Arg Leu Arg Ser Leu Ser Arg Asn Ala Phe Ala Gly
180 185 190

Leu Leu Lys Leu Lys Glu Leu His Leu Glu His Asn Gln Phe Ser Lys
195 200 205

Ile Asn Phe Ala His Phe Pro Arg Leu Phe Asn Leu Arg Ser Ile Tyr
210 215 220

Leu Gln Trp Asn Arg Ile Arg Ser Ile Ser Gln Gly Leu Thr Trp Thr
225 230 235 240

Trp Ser Ser Leu His Asn Leu Asp Leu Ser Gly Asn Asp Ile Gln Gly
245 250 255

Ile Glu Pro Gly Thr Phe Lys Cys Leu Pro Asn Leu Gln Lys Leu Asn
260 265 270

Leu Asp Ser Asn Lys Leu Thr Asn Ile Ser Gln Glu Thr Val Asn Ala
275 280 285

Trp Ile Ser Leu Ile Ser Ile Thr Leu Ser Gly Asn Met Trp Glu Cys
290 295 300

Ser Arg Ser Ile Cys Pro Leu Phe Tyr Trp Leu Lys Asn Phe Lys Gly
305 310 315 320

Asn Lys Glu Ser Thr Met Ile Cys Ala Gly Pro Lys His Ile Gln Gly
325 330 335

Glu Lys Val Ser Asp Ala Val Glu Thr Tyr Asn Ile Cys Ser Glu Val
340 345 350

Gln Val Val Asn Thr Glu Arg Ser His Leu Val Pro Gln Thr Pro Gln
355 360 365

Lys Pro Leu Ile Ile Pro Arg Pro Thr Ile Phe Lys Pro Asp Val Thr
370 375 380

Gln Ser Thr Phe Glu Thr Pro Ser Pro Ser Pro Gly Phe Gln Ile Pro
385 390 395 400

```
Gly Ala Glu Gln Glu Tyr Glu His Val Ser Phe His Lys Ile Ile Ala
                405                 410                 415

Gly Ser Val Ala Leu Phe Leu Ser Val Ala Met Ile Leu Leu Val Ile
            420                 425                 430

Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys Gln Leu Gln Gln
        435                 440                 445

His Ser Leu Met Lys Arg Arg Arg Lys Lys Ala Arg Glu Ser Glu Arg
    450                 455                 460

Gln Met Asn Ser Pro Leu Gln Glu Tyr Tyr Val Asp Tyr Lys Pro Thr
465                 470                 475                 480

Asn Ser Glu Thr Met Asp Ile Ser Val Asn Gly Ser Gly Pro Cys Thr
                485                 490                 495

Tyr Thr Ile Ser Gly Ser Arg Glu Cys Glu Val
            500                 505
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<210> 34
<211> 581
<212> PRT
<213> Homo sapiens

<400> 34

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Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala Leu
1               5                   10                  15

Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala Glu Arg
            20                  25                  30

Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val Tyr Cys Glu
        35                  40                  45

Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser Ala Gly Cys Leu
    50                  55                  60

Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys Leu Lys Tyr Asn Gln
65                  70                  75                  80

Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu Tyr Leu Asp His Asn His
                85                  90                  95
```

Ile Ser Asn Ile Asp Glu Asn Ala Phe Asn Gly Ile Arg Arg Leu Lys
100 105 110

Glu Leu Ile Leu Ser Ser Asn Arg Ile Ser Tyr Phe Leu Asn Asn Thr
115 120 125

Phe Arg Pro Val Thr Asn Leu Arg Asn Leu Asp Leu Ser Tyr Asn Gln
130 135 140

Leu His Ser Leu Gly Ser Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu
145 150 155 160

Ser Leu His Leu Arg Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile
165 170 175

Phe Gln Asp Cys Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg
180 185 190

Ile Arg Ser Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys
195 200 205

Glu Leu His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu
210 215 220

Phe Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys
225 230 235 240

Ile Ser Val Ile Gly Gln Thr Met Ser Trp Thr Trp Ser Ser Leu Gln
245 250 255

Arg Leu Asp Leu Ser Gly Asn Glu Ile Glu Ala Phe Ser Gly Pro Ser
260 265 270

Val Phe Gln Cys Val Pro Asn Leu Gln Arg Leu Asn Leu Asp Ser Asn
275 280 285

Lys Leu Thr Phe Ile Gly Gln Glu Ile Leu Asp Ser Trp Ile Ser Leu
290 295 300

Asn Asp Ile Ser Leu Ala Gly Asn Ile Trp Glu Cys Ser Arg Asn Ile
305 310 315 320

Cys Ser Leu Val Asn Trp Leu Lys Ser Phe Lys Gly Leu Arg Glu Asn
325 330 335

Thr Ile Ile Cys Ala Ser Pro Lys Glu Leu Gln Gly Val Asn Val Ile

340 345 350

Asp Ala Val Lys Asn Tyr Ser Ile Cys Gly Lys Ser Thr Thr Glu Arg
355 360 365

Phe Asp Leu Ala Arg Ala Leu Pro Lys Pro Thr Phe Lys Pro Lys Leu
370 375 380

Pro Arg Pro Lys His Glu Ser Lys Pro Pro Leu Pro Pro Thr Val Gly
385 390 395 400

Ala Thr Glu Pro Gly Pro Glu Thr Asp Ala Asp Ala Glu His Ile Ser
405 410 415

Phe His Lys Ile Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Leu
420 425 430

Val Ile Leu Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser
435 440 445

Met Lys Gln Leu Gln Gln Arg Ser Leu Met Arg Arg His Arg Lys Lys
450 455 460

Lys Arg Gln Ser Leu Lys Gln Met Thr Pro Ser Thr Gln Glu Phe Tyr
465 470 475 480

Val Asp Tyr Lys Pro Thr Asn Thr Glu Thr Ser Glu Met Leu Leu Asn
485 490 495

Gly Thr Gly Pro Cys Thr Tyr Asn Lys Ser Gly Ser Arg Glu Cys Glu
500 505 510

Ile Pro Leu Ser Met Asn Val Ser Thr Phe Leu Ala Tyr Asp Gln Pro
515 520 525

Thr Ile Ser Tyr Cys Gly Val His His Glu Leu Leu Ser His Lys Ser
530 535 540

Phe Glu Thr Asn Ala Gln Glu Asp Thr Met Glu Thr His Leu Glu Thr
545 550 555 560

Glu Leu Asp Leu Ser Thr Ile Thr Thr Ala Gly Arg Ile Ser Asp His
565 570 575

Lys Gln Gln Leu Ala
580

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aatgtattta tttgcatttt tatgctgtgt acttttgaat atagtgattt tattattttt 240

agtaaaattt catgaactgc tgtgtacttt ggtttcacac actcaacacc ataccaataa 300

tgaaattatt agtaatttca agttactaat tgattggctg tcatgtgcta taaatgataa 360

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cagttgcatt aattctaact cccctaattt aggacctttt ttttctta 468

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tgaaattatt agtaatttca agttactaat tgattggctg tcatgtgcta taaatgataa 360

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<210> 40
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<212> PRT
<213> Homo sapiens

<400> 40

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Val Gly Lys Phe Asp Trp Arg Gln Gln Tyr Val Gly Lys Val Lys Phe
35 40 45

Ala Ser Leu Glu Phe Ser Pro Gly Ser Lys Lys Leu Val Val Ala Thr
50 55 60

Glu Lys Asn Val Ile Ala Ala Leu Asn Ser Arg Thr Gly Glu Ile Leu

65 70 75 80

Trp Arg His Val Asp Lys Gly Thr Ala Glu Gly Ala Val Asp Ala Met
85 90 95

Leu Leu His Gly Gln Asp Val Ile Thr Val Ser Asn Gly Gly Arg Ile
100 105 110

Met Arg Ser Trp Glu Thr Asn Ile Gly Gly Leu Asn Trp Glu Ile Thr
115 120 125

Leu Asp Ser Gly Ser Phe Gln Ala Leu Gly Leu Val Gly Leu Gln Glu
130 135 140

Ser Val Arg Tyr Ile Ala Val Leu Lys Lys Thr Thr Leu Ala Leu His
145 150 155 160

His Leu Ser Ser Gly His Leu Lys Trp Val Glu His Leu Pro Glu Ser
165 170 175

Asp Ser Ile His Tyr Gln Met Val Tyr Ser Tyr Gly Ser Gly Val Val
180 185 190

Trp Ala Leu Gly Val Val Pro Phe Ser His Val Asn Ile Val Lys Phe
195 200 205

Asn Val Glu Asp Gly Glu Ile Val Gln Gln Val Arg Val Ser Thr Pro
210 215 220

Trp Leu Gln His Leu Ser Gly Ala Cys Gly Val Val Asp Glu Ala Val
225 230 235 240

Leu Val Cys Pro Asp Pro Ser Ser Arg Ser Leu Gln Thr Leu Ala Leu
245 250 255

Glu Thr Glu Trp Glu Leu Arg Gln Ile Pro Leu Gln Ser Leu Asp Leu
260 265 270

Glu Phe Gly Ser Gly Phe Gln Pro Arg Val Leu Pro Thr Gln Pro Asn
275 280 285

Pro Val Asp Ala Ser Arg Ala Gln Phe Phe Leu His Leu Ser Pro Ser
290 295 300

His Tyr Ala Leu Leu Gln Tyr His Tyr Gly Thr Leu Ser Leu Leu Lys
305 310 315 320

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Asn Phe Pro Gln Thr Ala Leu Val Ser Phe Ala Thr Thr Gly Glu Lys
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Thr Val Ala Ala Val Met Ala Cys Arg Asn Glu Val Gln Lys Ser Ser
            340                 345                 350

Ser Ser Glu Asp Gly Ser Met Gly Ser Phe Ser Glu Lys Ser Ser Ser
        355                 360                 365

Lys Asp Ser Leu Ala Cys Phe Asn Gln Thr Tyr Thr Ile Asn Leu Tyr
    370                 375                 380

Leu Val Glu Thr Gly Arg Arg Leu Leu Asp Thr Thr Ile Thr Phe Ser
385                 390                 395                 400

Leu Glu Gln Ser Gly Thr Arg Pro Glu Arg Leu Tyr Ile Gln Val Phe
                405                 410                 415

Leu Lys Lys Asp Asp Ser Val Gly Tyr Arg Ala Leu Val Gln Thr Glu
            420                 425                 430

Asp His Leu Leu Leu Phe Leu Gln Gln Leu Ala Gly Lys Val Val Leu
        435                 440                 445

Trp Ser Arg Glu Glu Ser Leu Ala Glu Val Val Cys Leu Glu Met Val
    450                 455                 460

Asp Leu Pro Leu Thr Gly Ala Gln Ala Glu Leu Glu Gly Glu Phe Gly
465                 470                 475                 480

Lys Lys Ala Asp Gly Leu Leu Gly Met Phe Leu Lys Arg Leu Ser Ser
                485                 490                 495

Gln Leu Ile Leu Leu Gln Ala Trp Thr Ser His Leu Trp Lys Met Phe
            500                 505                 510

Tyr Asp Ala Arg Lys Pro Arg Ser Gln Ile Lys Asn Glu Ile Asn Ile
        515                 520                 525

Asp Thr Leu Ala Arg Asp Glu Phe Asn Leu Gln Lys Met Met Val Met
    530                 535                 540

Val Thr Ala Ser Gly Lys Leu Phe Gly Ile Glu Ser Ser Ser Gly Thr
545                 550                 555                 560
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Ile Leu Trp Lys Gln Tyr Leu Pro Asn Val Lys Pro Asp Ser Ser Phe
                565                 570                 575

Lys Leu Met Val Gln Arg Thr Thr Ala His Phe Pro His Pro Pro Gln
            580                 585                 590

Cys Thr Leu Leu Val Lys Asp Lys Glu Ser Gly Met Ser Ser Leu Tyr
        595                 600                 605

Val Phe Asn Pro Ile Phe Gly Lys Trp Ser Gln Val Ala Pro Pro Val
    610                 615                 620

Leu Lys Arg Pro Ile Leu Gln Ser Leu Leu Leu Pro Val Met Asp Gln
625                 630                 635                 640

Asp Tyr Ala Lys Val Leu Leu Leu Ile Asp Asp Glu Tyr Lys Val Thr
                645                 650                 655

Ala Phe Pro Ala Thr Arg Asn Val Leu Arg Gln Leu His Glu Leu Ala
            660                 665                 670

Pro Ser Ile Phe Phe Tyr Leu Val Asp Ala Glu Gln Gly Arg Leu Cys
        675                 680                 685

Gly Tyr Arg Leu Arg Lys Asp Leu Thr Thr Glu Leu Ser Trp Glu Leu
    690                 695                 700

Thr Ile Pro Pro Glu Val Gln Arg Ile Val Lys Val Lys Gly Lys Arg
705                 710                 715                 720

Ser Ser Glu His Val His Ser Gln Gly Arg Val Met Gly Asp Arg Ser
                725                 730                 735

Val Leu Tyr Lys Ser Leu Asn Pro Asn Leu Leu Ala Val Val Thr Glu
            740                 745                 750

Ser Thr Asp Ala His His Glu Arg Thr Phe Ile Gly Ile Phe Leu Ile
        755                 760                 765

Asp Gly Val Thr Gly Arg Ile Ile His Ser Ser Val Gln Lys Lys Ala
    770                 775                 780

Lys Gly Pro Val His Ile Val His Ser Glu Asn Trp Val Val Tyr Gln
785                 790                 795                 800
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Tyr Trp Asn Thr Lys Ala Arg Arg Asn Glu Phe Thr Val Leu Glu Leu
805 810 815

Tyr Glu Gly Thr Glu Gln Tyr Asn Ala Thr Ala Phe Ser Ser Leu Asp
820 825 830

Arg Pro Gln Leu Pro Gln Val Leu Gln Gln Ser Tyr Ile Phe Pro Ser
835 840 845

Ser Ile Ser Ala Met Glu Ala Thr Ile Thr Glu Arg Gly Ile Thr Ser
850 855 860

Arg His Leu Leu Ile Gly Leu Pro Ser Gly Ala Ile Leu Ser Leu Pro
865 870 875 880

Lys Ala Leu Leu Asp Pro Arg Arg Pro Glu Ile Pro Thr Glu Gln Ser
885 890 895

Arg Glu Glu Asn Leu Ile Pro Tyr Ser Pro Asp Val Gln Ile His Ala
900 905 910

Glu Arg Phe Ile Asn Tyr Asn Gln Thr Val Ser Arg Met Arg Gly Ile
915 920 925

Tyr Thr Ala Pro Ser Gly Leu Glu Ser Thr Cys Leu Val Val Ala Tyr
930 935 940

Gly Leu Asp Ile Tyr Gln Thr Arg Val Tyr Pro Ser Lys Gln Phe Asp
945 950 955 960

Val Leu Lys Asp Asp Tyr Asp Tyr Val Leu Ile Ser Ser Val Leu Phe
965 970 975

Gly Leu Val Phe Ala Thr Met Ile Thr Lys Arg Leu Ala Gln Val Lys
980 985 990

Leu Leu Asn Arg Ala Trp Arg
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 42

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Ser Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser Ile
20 25 30

Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr Tyr Phe
35 40 45

Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln Leu Cys Asp
50 55 60

Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu His Cys Val Lys
65 70 75 80

Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg Leu Ser Lys Asp Arg
85 90 95

Ser Thr Leu Gln Val Leu Asp Ser Ala Thr Gly Asn Trp Phe Ser Ala
100 105 110

Cys Phe Asp Asn Phe Thr Glu Ala Leu Ala Glu Thr Ala Cys Arg Gln
115 120 125

Met Gly Tyr Ser Ser Lys Pro Thr Phe Arg Ala Val Glu Ile Gly Pro
130 135 140

Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn Ser Gln Glu Leu
145 150 155 160

Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser Gly Ser Leu Val Ser
165 170 175

Leu His Cys Leu Ala Cys Gly Lys Ser Leu Lys Thr Pro Arg Val Val
180 185 190

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Gly Gly Glu Glu Ala Ser Val Asp Ser Trp Pro Trp Gln Val Ser Ile
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Gln Tyr Asp Lys Gln His Val Cys Gly Gly Ser Ile Leu Asp Pro His
    210                 215                 220

Trp Val Leu Thr Ala Ala His Cys Phe Arg Lys His Thr Asp Val Phe
225                 230                 235                 240

Asn Trp Lys Val Arg Ala Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser
                245                 250                 255

Leu Ala Val Ala Lys Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro
            260                 265                 270

Lys Asp Asn Asp Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe
        275                 280                 285

Ser Gly Thr Val Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu
    290                 295                 300

Thr Pro Ala Thr Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln
305                 310                 315                 320

Asn Gly Gly Lys Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val
                325                 330                 335

Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu Val
            340                 345                 350

Thr Glu Lys Met Met Cys Ala Gly Ile Pro Glu Gly Gly Val Asp Thr
        355                 360                 365

Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Tyr Gln Ser Asp Gln Trp
    370                 375                 380

His Val Val Gly Ile Val Ser Trp Gly Tyr Gly Cys Gly Gly Pro Ser
385                 390                 395                 400

Thr Pro Gly Val Tyr Thr Lys Val Ser Ala Tyr Leu Asn Trp Ile Tyr
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Asn Val Trp Lys Ala Glu Leu
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<210> 43
<211> 552
<212> DNA
<213> Homo sapiens

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tttctataaa atagagtaat atttttttact ttattgcatt gtttggggga aaatgagcta 120

atgtataaaa agtaaggaat acgaaaaagg tacactttgt gggtagtggg aatagctgag 180

caggatttga cgaataagtg tgagtgaatt caagatggtt gaaagagtag taccattaca 240

ctgggtagat aaggaaagaa aagcacattt taggtcaaag gaacaagtca tgtcctatga 300

ctgttcagcc cagttttcat ccataatcaa ctttattgct tcacaattct gttggttatg 360

cttattttgt cttttgagga tataactgca agaattccca gcagttccta tcaaatatga 420

atcttaaccc acatacacaa atttgtgtta taatatgaaa atgagaccca aaccaaagtg 480

attctatttg aagatctcca tggtaagtca tacactggga tagctgtcag atttctcttc 540

ttggttttct gt 552

<210> 44
<211> 2707
<212> DNA
<213> Homo sapiens

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caggggggcc cgccggccgc ggacgccgct gggcccgacg acatggagcc gaagaagggc 180

acgggggccc ccaaggagtg cggggaggag gagccccgga cctgctgcgg ctgccggttc 240

ccgctgctgc tcgccctgct gcagctggcc ctgggcatcg ccgtgaccgt ggtgggcttc 300

ctcatggcga gcatcagctc ctccctgcta gtcagggaca ctccattttg ggctgggatc 360

attgtctgct tagtggccta tcttggcttg tttatgcttt gtgtctcata tcaggttgac 420

gaacggacat gtattcaatt ttctatgaaa ctgttatact ttctgctgag tgccctgggc 480

ctgacggtct gtgtgctggc cgtggccttt gccgcccacc actattcgca gctcacacag 540

tttacctgtg agaccacact cgactcttgc cagtgcaaac tgccctcctc ggagccgctc 600

agcaggacct ttgtttaccg ggatgtgacg gactgtacca gcgtcactgg cactttcaaa 660

ctgttcttac tcatccagat gattcttaat ttggtctgcg gccttgtgtg cttgttggcc 720

tgctttgtga tgtggaaaca taggtaccag gtcttctatg tgggtgtcag gatatgctcc 780

ctcacggctt ccgaaggccc ccagcaaaag atctaacatt cttgctcaaa gttgcgagag 840

aaagtagcac atggagtagc tgaggttaaa caaacaaaaa aaaattttaa acaaagaaag 900

gaaaaaaatt gacaataaaa gtcactcttc taattgaata tttttatatt tttatgaaac 960

aaaagagcat ttcttcaggt ttctattgta tttttttaa cattcttgca gagaaagcaa 1020

gatccaaatt gattttggga tattaaaagt taacagaaca ctgaacaagg aaagaatggc 1080

atagatctat ctttacagtc tggagttaat tcctgttaac tcattttatc cattccttac 1140

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gctaaatttt gtggcatctt cctctagtcc ttcccacctc cagtcatcag ccccactctg 1260

tcttggagac aggcaggagg tgggggaaga gctgaatctc tttattttcc ctggtagaga 1320

catcttcaag gcatgaaata gcttaaagag cagagtagaa atggaagagg ctttgcaaaa 1380

ggctagataa ctaacaacac ctgggttggg gcggcggcct cttctcttca gctcccttag 1440

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aaggtggtgg tagttgtatt ctaaatgatg tagaaggttt aaaaataatt acattatgct 1560

tctattctat catctaaaac aaatcattaa aactaatttc tagctaattg ttaattataa 1620

ttatgctcag aagtctattt aatgagctct gactgtactt acgctgcact gtcggtgtta 1680

agagaaatta ctctcacaag agcagaggcc tgaagattct ttcttctgaa agccaagcac 1740

cacaaggaaa aaaaaattat taatagctca ggttaaaaac acccatttaa acaaaaacaa 1800

gagcatttgt aataggaagt gtttatacaa acagcacatt tgtgatatgt tgaaaagcat 1860

ctctcttggc aaccaatcta tgtttgagga agattgggta atgctgatgt gttccattca 1920

tgaaactgta tttgatacat aatcctatta ttaattcgta tgcttagtca acctaggaaa 1980

tcaaaataat gttttgaagt tcttatttga gcaatatggc cttgacttgg agggtagttt 2040

tagttgtttt gtttttaagt gactgtggtt taaagcacaa atgccccaag gtggggagac 2100

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gctaaaaatg gaaattcatg aaacataaat ggtatcaaga actttatcag tatgctttgt 2220

tgaaagcaga aattaagata ataattgagt tcaattcgcc tctccgcatt gcctattgat 2280

acactttact aatcatgaaa ttctaaccta aaaggaaaac attttcctgc ttgtcttaga 2340

agaaagtgga ataattccac tgattgtgat aatggtttca atttctacac aatataaata 2400

tccagtataa aggaaagcgt taagtcggta agctagagga ttgtaaatat cttttatgtc 2460

ctctagataa aacacccgat taacagatgt taaacctttt aatgttttga tttgctttaa 2520

aaatggcctt cctacacatt agctccagct aaaaagacac attggagagc ttagaggata 2580

agtctctgga gcagaattta tcacacacaa aagttacacc aacagaatac caagcagaat 2640

gatgaggacc tgtaaaatac cttgtgccct attaaaaaaa aaaaaaaaaa aaaaaaaaaa 2700

aaaaaaa 2707

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<211> 1062
<212> DNA
<213> Homo sapiens

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tgcctgttta ttttttttte taattctctg gtcatcgcgg cagtgatcaa aaacagaaaa 180

tttcatttcc ccttctacta cctgttggct aatttagctg ctgccgattt cttcgctgga 240

attgcctatg tattcctgat gtttaacaca ggcccagttt caaaaacttt gactgtcaac 300

cgctggtttc tccgtcaggg gcttctggac agtagcttga ctgcttccct caccaacttg 360

ctggttatcg ccgtggagag gcacatgtca atcatgagga tgcgggtcca tagcaacctg 420

accaaaaaga gggtgacact gctcattttg cttgtctggg ccatcgccat ttttatgggg 480

gcggtcccca cactgggctg gaattgcctc tgcaacatct ctgcctgctc ttccctggcc 540

cccatttaca gcaggagtta ccttgttttc tggacagtgt ccaacctcat ggccttcctc 600

atcatggttg tggtgtacct gcggatctac gtgtacgtca agaggaaaac caacgtcttg 660

tctccgcata caagtgggtc catcagccgc cggaggacac ccatgaagct aatgaagacg 720

gtgatgactg tcttaggggc gtttgtggta tgctggaccc cgggcctggt ggttctgctc 780

ctcgacggcc tgaactgcag gcagtgtggc gtgcagcatg tgaaaaggtg gttcctgctg 840

ctggcgctgc tcaactccgt cgtgaacccc atcatctact cctacaagga cgaggacatg 900

tatggcacca tgaagaagat gatctgctgc ttctctcagg agaacccaga gaggcgtccc 960

tctcgcatcc cctccacagt cctcagcagg agtgacacag gcagccagta catagaggat 1020

agtattagcc aaggtgcagt ctgcaataaa agcacttcct aa 1062

<210> 46
<211> 353
<212> PRT
<213> Homo sapiens

<400> 46

Met Asn Glu Cys His Tyr Asp Lys His Met Asp Phe Phe Tyr Asn Arg
1 5 10 15

Ser Asn Thr Asp Thr Val Asp Asp Trp Thr Gly Thr Lys Leu Val Ile
20 25 30

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Val Leu Cys Val Gly Thr Phe Phe Cys Leu Phe Ile Phe Phe Ser Asn
        35                  40                  45

Ser Leu Val Ile Ala Ala Val Ile Lys Asn Arg Lys Phe His Phe Pro
    50                  55                  60

Phe Tyr Tyr Leu Leu Ala Asn Leu Ala Ala Ala Asp Phe Phe Ala Gly
65                  70                  75                  80

Ile Ala Tyr Val Phe Leu Met Phe Asn Thr Gly Pro Val Ser Lys Thr
                85                  90                  95

Leu Thr Val Asn Arg Trp Phe Leu Arg Gln Gly Leu Leu Asp Ser Ser
            100                 105                 110

Leu Thr Ala Ser Leu Thr Asn Leu Leu Val Ile Ala Val Glu Arg His
        115                 120                 125

Met Ser Ile Met Arg Met Arg Val His Ser Asn Leu Thr Lys Lys Arg
    130                 135                 140

Val Thr Leu Leu Ile Leu Leu Val Trp Ala Ile Ala Ile Phe Met Gly
145                 150                 155                 160

Ala Val Pro Thr Leu Gly Trp Asn Cys Leu Cys Asn Ile Ser Ala Cys
                165                 170                 175

Ser Ser Leu Ala Pro Ile Tyr Ser Arg Ser Tyr Leu Val Phe Trp Thr
            180                 185                 190

Val Ser Asn Leu Met Ala Phe Leu Ile Met Val Val Val Tyr Leu Arg
        195                 200                 205

Ile Tyr Val Tyr Val Lys Arg Lys Thr Asn Val Leu Ser Pro His Thr
    210                 215                 220

Ser Gly Ser Ile Ser Arg Arg Arg Thr Pro Met Lys Leu Met Lys Thr
225                 230                 235                 240

Val Met Thr Val Leu Gly Ala Phe Val Val Cys Trp Thr Pro Gly Leu
                245                 250                 255

Val Val Leu Leu Leu Asp Gly Leu Asn Cys Arg Gln Cys Gly Val Gln
            260                 265                 270
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His Val Lys Arg Trp Phe Leu Leu Leu Ala Leu Leu Asn Ser Val Val
        275                 280                 285

Asn Pro Ile Ile Tyr Ser Tyr Lys Asp Glu Asp Met Tyr Gly Thr Met
    290                 295                 300

Lys Lys Met Ile Cys Cys Phe Ser Gln Glu Asn Pro Glu Arg Arg Pro
305                 310                 315                 320

Ser Arg Ile Pro Ser Thr Val Leu Ser Arg Ser Asp Thr Gly Ser Gln
                325                 330                 335

Tyr Ile Glu Asp Ser Ile Ser Gln Gly Ala Val Cys Asn Lys Ser Thr
            340                 345                 350

Ser
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<210> 47
<211> 27
<212> DNA
<213> Artificial

<220>
<223> PCR primer for amplifying EDG7.

<400> 47
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<210> 48
<211> 24
<212> DNA
<213> Artificial

<220>
<223> PCR primer for amplifying EDG7.

<400> 48
gcagcaggaa ccacctttc acat 24

<210> 49
<211> 20
<212> DNA
<213> Artificial

<220>
<223> PCR primer for amplifying GAPDH.

<400> 49
accacagtcc atgccatcac 20

<210> 50

<211> 20
<212> DNA
<213> Artificial

<220>
<223> PCR primer for amplifying GAPDH.

<400> 50
tccaccaccc tgttgctgta 20

<210> 51
<211> 47
<212> DNA
<213> Artificial

<220>
<223> PCR primer comprising GAPDH sequence for amplifying EDG7.

<400> 51
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<210> 52
<211> 43
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<220>
<223> PCR primer comprising GAPDH sequence for amplifying EDG7.

<400> 52
gcagcaggaa ccacctttc acattccacc accctgttgc tta 43

<210> 53
<211> 9
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<220>
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<400> 53

Tyr Leu Val Glu Asp Val Leu Leu Leu
1 5

<210> 54
<211> 9
<212> PRT
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<220>
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<400> 54

Val Leu Asp Asp Ser Ile Tyr Leu Val
1 5

<210> 55
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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Leu Leu Trp Arg Lys Gln Leu Phe Cys
1 5

<210> 56
<211> 9
<212> PRT
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<220>
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<400> 56

Tyr Leu Tyr Thr Ala Asn Val Thr Leu
1 5

<210> 57
<211> 9
<212> PRT
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<220>
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<400> 57

Asn Leu Leu His Gly Leu Asn Leu Leu
1 5

<210> 58
<211> 9
<212> PRT
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<220>
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<400> 58

Ala Val Leu Asp Asp Ser Ile Tyr Leu
1 5

<210> 59
<211> 9
<212> PRT

<213> Artificial Sequence

<220>
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<400> 59

Val Met Asn Asp Arg Leu Tyr Ala Ile
1 5

<210> 60
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 60

Val Glu Val Glu Asn Phe Leu Phe Val
1 5

<210> 61
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 61

Ser Leu Phe Ser Ser His Pro Pro Leu
1 5

<210> 62
<211> 9
<212> PRT
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<220>
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<400> 62

Gln Leu Phe Cys Asp Val Thr Leu Thr
1 5

<210> 63
<211> 9
<212> PRT
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<220>
<223> HLA-24 Binding MERET Peptides

<400> 63

Lys Tyr Leu Val Glu Asp Val Leu Leu
1 5

<210> 64
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-24 Binding MERET Peptides

<400> 64

Leu Tyr Ala Ile Gly Gly Asn His Leu
1 5

<210> 65
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 65

Asn Phe Glu Glu Met Arg Ala Leu Leu
1 5

<210> 66
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 66

Leu Phe Gln Met Ser Val Leu Trp Leu
1 5

<210> 67
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-24 Binding MERET Peptides

<400> 67

Gly Phe Ser His Leu Asp Val Met Leu
1 5

<210> 68
<211> 9
<212> PRT
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<220>
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<400> 68

Gln Phe His Cys His Lys Ala Val Leu
1 5

<210> 69
<211> 9
<212> PRT
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<220>
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<400> 69

Arg Thr Asp Pro Val Cys Gln Lys Leu
1 5

<210> 70
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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Arg Tyr Asp Pro Arg Phe Asn Ser Trp
1 5

<210> 71
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-24 Binding MERET Peptides

<400> 71

Lys Met Leu Leu Leu Val Gly Gly Leu
1 5

<210> 72
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-24 Binding MERET Peptides

<400> 72

Cys Val Val Glu Val Glu Asn Phe Leu
1 5

<210> 73
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 73

Met Leu Val Glu Cys Tyr Asp Pro Lys
1 5

<210> 74
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 74

Lys Leu Leu Leu Asp Ala Met Asn Tyr
1 5

<210> 75
<211> 9
<212> PRT
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<220>
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<400> 75

Ala Leu His Gly Leu Glu Glu Thr Lys
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<210> 76
<211> 33
<212> PRT
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<220>
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<400> 76

His Leu Ala Ala Asx Ile Asn Asp Ile Asn Gly Met Glu Arg Glu Thr
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Pro Glu Pro Thr Ile Asp Glu Ser Ile Leu His Ile Pro Gln Val Thr
20 25 30

Lys

<210> 77
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<212> PRT
<213> Artificial Sequence

<220>
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Leu Leu Leu Asn Phe Glu Glu Met Arg
1 5

<210> 78
<211> 9
<212> PRT
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<220>
<223> HLA-A3 Binding MERET Peptides

<400> 78

Asn Leu Glu Thr Asn Glu Trp Arg Tyr
1 5

<210> 79
<211> 9
<212> PRT
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<220>
<223> HLA-A3 Binding MERET Peptides

<400> 79

Met Gln Tyr Ala Pro Asp Leu Met Lys
1 5

<210> 80
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> HLA-A3 Binding MERET Peptides

<400> 80

Tyr Leu Val Glu Asp Val Leu Leu Leu
1 5

<210> 81
<211> 9
<212> PRT
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<220>
<223> HLA-A3 Binding MERET Peptides

<400> 81

Leu Val Gln Tyr Tyr Asp Asp Glu Lys
1 5

<210> 82
<211> 9
<212> PRT
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<220>
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<400> 82

Ala Met Asn Tyr His Leu Met Pro Phe
1 5

<210> 83
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 83

Val Val Glu Val Glu Asn Phe Leu Phe
1 5

<210> 84
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 84

Asn Leu Glu Thr Asn Glu Trp Arg Tyr

1 5

<210> 85
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 85

Arg Thr Asp Pro Val Cys Gln Lys Leu
1 5

<210> 86
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 86

Asn Gly Glu Tyr Val Pro Trp Leu Tyr
1 5

<210> 87
<211> 9
<212> PRT
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<220>
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<400> 87

Val Ile Leu Pro Ser Cys Val Pro Tyr
1 5

<210> 88
<211> 9
<212> PRT
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<220>
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<400> 88

Trp Leu Glu His Asp Arg Glu Thr Arg
1 5

<210> 89
<211> 9

<212> PRT
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<220>
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<400> 89

Val Ala Glu Pro Leu Ala Gly Pro Ala
1 5

<210> 90
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 90

Glu Ser Glu Leu Ala Leu Phe Gln Met
1 5

<210> 91
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 91

Glu Val Glu Asn Phe Leu Phe Val Leu
1 5

<210> 92
<211> 9
<212> PRT
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<220>
<223> HLA-A1 Binding MERET Peptides

<400> 92

Ser Val Glu Cys Tyr Asn Leu Glu Thr
1 5

<210> 93
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-B7 Binding MERET Peptides

<400> 93

Leu Pro Pro Pro Val Glu Ser Glu Leu
1 5

<210> 94
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-B7 Binding MERET Peptides

<400> 94

Gly Pro Ala Cys Val Thr Val Ile Leu
1 5

<210> 95
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-B7 Binding MERET Peptides

<400> 95

Asp Pro Ser His Ser Asp Asn Leu Leu
1 5

<210> 96
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-B7 Binding MERET Peptides

<400> 96

Asp Pro Val Cys Gln Lys Leu Leu Leu
1 5

<210> 97
<211> 9
<212> PRT
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<220>
<223> HLA-B7 Binding MERET Peptides

<400> 97

Ala Val Leu Asp Asp Ser Ile Tyr Leu
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<210> 98
<211> 9
<212> PRT
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<220>
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<400> 98

Ser Pro Arg Ala Ile Asn Asn Leu Val
1 5

<210> 99
<211> 9
<212> PRT
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<220>
<223> HLA-B7 Binding MERET Peptides

<400> 99

Glu Met Arg Ala Leu Leu Asp Ser Leu
1 5

<210> 100
<211> 9
<212> PRT
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<220>
<223> HLA-B7 Binding MERET Peptides

<400> 100

Gly Gly Arg Asn Glu Thr Gly Tyr Leu
1 5

<210> 101
<211> 9
<212> PRT
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<220>
<223> HLA-B7 Binding MERET Peptides

<400> 101

Gly Leu Arg Leu Val Leu Glu Tyr Leu
1 5

<210> 102
<211> 9
<212> PRT

<213> Artificial Sequence

<220>
<223> HLA-B7 Binding MERET Peptides

<400> 102

Arg Ile Arg Ser Asn Lys Lys Met Leu
1 5